

and is pressed down by an amount of 0.1 mm to 2 mm, with pressure being applied as it is moved. In this way, before performing the peeling, it is important to create a portion where peeling can occur easily, which serves as a starter. By performing the preprocessing in which the selective (partial) reduction of the adhesion takes place, defective peelings are eliminated and yield is improved.

[0153] Next, the second substrate **835** and the layer to be peeled **833** are adhered to each other using the first adhesive **834**. (See FIG. 8B). The first adhesive **834** may be a reactive-curing type adhesive, a thermal-curing type adhesive, an ultraviolet-curing type adhesive or other such photo-curing type adhesive, or may be an aerophobic-type adhesive, or other various types of curing adhesive. Moreover, these adhesives may be soluble such that they dissolve in a solvent, and/or may be photosensitive such that their adhesiveness decreases when irradiated with light. The composition of these adhesives may be, for example, epoxy-type, acrylic-type, silicon-type or anything else. The application of the adhesive may be carried out by a coating method, for example. Note that, the first adhesive is removed in subsequent steps. Here, a soluble adhesive material which can dissolve in a solvent is used as the first adhesive.

[0154] Further, instead of the first adhesive **834**, a tape having adhesive on one or both of its surfaces may be used. The tape may include on one or both of its surfaces an adhesive which is soluble so as to dissolve in a solvent, or is photosensitive so as to lose adhesiveness when irradiated with light.

[0155] The second substrate **835** may be constituted by a glass substrate, a quartz substrate, a ceramic substrate, a plastic substrate or the like. Further, it is also possible to use a semiconductor substrate such as a silicon substrate, or a metallic substrate such as a stainless steel substrate.

[0156] The present embodiment employs a highly rigid quartz substrate (thickness: 1.1 mm) for the second substrate **835**, having a thickness larger than the first substrate **830**. In the case where a plastic film is used for the second substrate, when the elements formed onto the first substrate **830** are transferred onto the plastic film—which is to say when the layer to be peeled **833** and the film are adhered to each other by the first adhesive **834** and the film is lifted up—there was a risk that the film will bend and cause cracks to form in the layer to be peeled **833**. Therefore, after fixing the layer to be peeled **833** formed over the first substrate **830** to the rigid second substrate **835** with the first adhesive **834**, the first substrate **830** is peeled. Then, after the plastic film (i.e., the third substrate **837**) is fixed to the layer with the second adhesive **836**, the second substrate **835** is removed. By following this procedure, it becomes difficult for cracks to occur.

[0157] Next, peeling is performed from the above-mentioned region where the adhesiveness has been reduced, and the first substrate **830** having the first material layer **831** is separated by using a physical means (FIG. 8C). Since the second material layer **832** exhibits compressional stress and the first material has tension stress, the separation can be achieved with relatively little force (such as the force of a human hand, or wind pressure of gas blown from a nozzle, or ultrasonic waves, etc.).

[0158] Thus, the layer to be peeled **833** formed onto the second material layer **832** can be separated from the first material layer **830**. FIG. 8D shows the post-peeled state.

[0159] Next, the third substrate **837** and the second material layer **832** (and the peeled layer **833**) are adhered together with the second adhesive **836**. (See FIG. 8E). It is important that the second adhesive **836** has greater adhesive force than the first adhesive **834**.

[0160] The second adhesive **836** may be a reactive-curing type adhesive, a thermal-curing type adhesive, an ultraviolet-curing type adhesive or other such photo-curing type adhesive, or may be an aerophobic-type adhesive, or other various types of curing adhesive. Moreover, these adhesives may be soluble such that they dissolve in a solvent, and/or may be photosensitive such that their adhesiveness decreases when irradiated with light. The composition of these adhesives may be, for example, epoxy-type, acrylic-type, silicon-type or anything else. The application of the adhesive may be carried out by a coating method, for example. Note that, the second adhesive becomes one support for the layer to be peeled at a subsequent step. For the second adhesive **836**, a material is used which will achieve a high degree of adhesion between the third substrate and the second adhesive, and also between the second adhesive and the layer to be peeled. Here, an ultraviolet-curing type adhesive is used for the second adhesive **836**.

[0161] Further, in the case where the second adhesive **836** is made of a material which is soluble so as to dissolve in a solvent, or is photosensitive such that it loses adhesive strength when exposed to light, it becomes possible to peel the third substrate at a later step, and it is possible for only the second adhesive to serve as the support. Further, instead of the second adhesive **836**, it is possible to use a tape having adhesive on one or both of its surfaces. The surface or surfaces of this tape may have an adhesive which is soluble so as to dissolve in a solvent, or photosensitive such that its adhesive strength decreases when the tape is exposed to light.

[0162] A flexible substrate may be used for the third substrate **837**. The present embodiment employs a plastic film for the third substrate **837**.

[0163] Once the situation shown in FIG. 8E is achieved, it is then soaked in the solvent and only the second substrate **835** is removed. (See FIG. 8F). Since the first adhesive is a soluble adhesive material, the second substrate **835** is removed easily, thus separating the second substrate **835** and the layer to be peeled **833**.

[0164] Further, an input/output terminal of the element contained in the layer to be peeled **833** is formed so as to be exposed from the topmost layer (i.e., the layer closest to the second substrate side) of the layer to be peeled. Therefore, after the step of separating the second substrate, it is preferable that the first adhesive is completely removed from the surface of the layer to be peeled so that the input/output terminal portion can be exposed.

[0165] Further, in the present embodiment, there is shown the example in which the soluble adhesive material is used for the first adhesive **834** such that it dissolves in a solvent and in which the second substrate is soaked in the solvent and removed. However, the invention is not particularly restricted to this configuration. For example, a thermal-curing type adhesive (which loses adhesive strength when irradiated with ultraviolet light) may be used for the first adhesive, and ultraviolet rays may be radiated to thereby remove the second substrate.